

# NASA News



National Aeronautics and  
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## **NASA SELECTS VIBRATION TEST CAPABILITY CONTRACTOR**

Cleveland - NASA has selected Benham Constructors LLC of Oklahoma City to receive a contract to design, build and commission a vibration and acoustic test capability that will support development of the Orion crew exploration vehicle. Orion will carry astronauts to the International Space Station and back to the moon in the next decade.

The capability will be developed in the Space Power Facility at Plum Brook Station, Sandusky, Ohio, which is operated by NASA's Glenn Research Center in Cleveland. This procurement specifically addresses the vibration and acoustic capability that will supplement the test capabilities currently existing at the Space Power Facility.

The contract is valued at \$51.4 million. Benham Constructors LLC will provide all labor and materials to construct the vibration and acoustic test capability, which will include a mechanical vibration facility, a reverberant acoustic test facility and a high-speed data acquisition system.

NASA selected Benham Constructors LLC for the cost-plus-incentive fee contract on a competitive basis. The design, build and commission portion of the contract has an 18-month period of performance with an additional six-month period of technical support.

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The environmental tests will demonstrate the ability of Orion hardware to meet specified performance requirements in simulated conditions, such as those experienced during launch, in orbit and during re-entry. Thermal, acoustic, mechanical vibration and electromagnetic compatibility tests will be conducted during Orion qualification. The launch abort system, crew module, service module and spacecraft adapter will be tested.

The Space Power Facility contains the world's largest thermal vacuum chamber, which measures 100 feet in diameter by 122 feet high. The facility can simulate in-space conditions, such as low vacuum environments and temperature extremes.

The new test capability at the Space Power Facility also will support future NASA Constellation Program testing. The Constellation Program is developing spacecraft and other systems to support NASA's exploration missions to the moon, Mars and other destinations in the solar system.

For information about NASA's Constellation Program, visit:

**<http://www.nasa.gov/constellation>**

For more information about Glenn's Space Power Facility, visit:

**<http://facilities.grc.nasa.gov/spf/>**

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